



VIRTUAL EYE by VIRTUAL VISION

A NEW ERA IN
VISUAL FIELD TESTING

Contact Us

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Built in partnership with University of Miami's
Bascom Palmer Eye Institute.



Visual Field Exams

10-2, 24-2, 30-2,
Superior 64 (ptosis),
and Esterman patterns.



Common Strategies

Screening (FDT or Normal)
Standard, Full Threshold,
Suprathreshold (Ptosis)



Familiar Reports

HFA | FDT Plots
Global Indices | MD PSD VFI
Reliability Indices | FL, FN, FP



Audio Instructions,
Error Prompts, and
Encouragement



Eye Tracking &
Photography
(Enterprise)



Telehealth Capable:

Access Virtual Eye reports
remotely





VIRTUAL EYE (VRVF)

Simple, fast, and accurate

The Virtual Reality Visual Field (VRVF) is an efficient mobile automated perimeter for both clinical and in-home use.



Low Cost

Reliable results with minimum investment



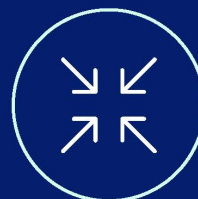
Efficient

No nurse, technician or dedicated room needed



Covid Safe

Easy to sterilize and reuse within minutes



Portable

Small, lightweight and battery powered



Comfortable

Studies prove it is loved by patients of all ages



ARVO 2022 - Glaucoma

Retrospective Validation of a Novel Virtual Reality Visual Field (VRVF) Standard Testing Algorithm, as Compared to Standard Automated Perimetry

“Of the 80 eyes, an ICC of 0.89 (95 % CI = 0.79 - 0.95; $p < 0.0001$) was calculated from the respective mean sensitivities of the VRVF Standard and the SITA Standard algorithms....ICC showed excellent agreement between VRVF Standard strategy and SITA Standard algorithms, suggesting that this novel algorithm is a promising tool in perimetric testing in glaucoma patients.”

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AGS 2022 - Value Analysis

Value-Cost Analysis and Comparison: Standard Automated Perimetry vs. Head-Mounted Perimetry

“Visual Field time using Virtual Vision’s Virtual Reality Visual Field device was 26% shorter than SAP time: 60.22 ± 27.27 minutes for SAP and 44.56 ± 13.53 minutes for VRVF ($P = 0.01$). The physical footprint of the SAP model is 46 L x 52 W x 58 H (cm) and the physical footprint of the Virtual Reality Visual Field model is 18 L x 13 W x 10 H (cm). SAP costs \$102,400 and Virtual Reality Visual Field costs \$36,000 per device over an estimated 20 years.”

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ARVO 2022 - Oculoplastics

Comparison of Virtual Reality Device vs. Standard Automated Perimetry in the Assessment of Superior Visual Field Prior to Functional Upper Eyelid Surgery

“39 eyes (20 OD, 19 OS) from 20 (15 female, 5 male) patients were tested using SAP and VR. There was significant improvement in the percentage of grid seen from the un-taped to taped state using VR (36% to 75%; $t(38) = -8.94$, $p < 0.001$) and SAP (34% to 64%; $t(38) = -7.16$, $p < 0.001$). SAP and Virtual Reality Visual Field IC results agreed in 29 eyes...VRVF test showed reliable agreement with SAP in meeting IC criteria and may offer a more accessible alternative to SAP in eyelid functional Visual Field evaluation.”

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AAO 2021 - Machine Learning

Novel Pre-Visual Field Algorithm Improves Performance and Predicts Visual Field Defects

“15 examinations of 14 patients were included for analysis. Virtual Vision’s Virtual Reality Visual Field pretest algorithm and CAVFT threshold values showed a strong correlation ($R^2 = .6214$), as did mean deviation and pattern standard deviation ($R^2 = .8336$, $.6135$)...This novel pre-test algorithm can be a potentially useful adjunct to complete automated visual field tests.”

University of Miami - Bascom Palmer Eye Institute



PRODUCT LINE



VRVF



VRVF PRO
(Eye-Tracking)





FAQ's



These questions have been asked by users of our platform. Feel free to contact us for any additional questions you may have.

Can I bill insurance?

Yes, please use bill codes 92083 for Virtual Eye Standard & Full Threshold, 92082 for Screening, and 92081 for Superior 64.

Is an eye patch required or correction for refractive error?

No eye patch nor trial lenses are required. Patients can use their own corrective lenses for the exam.

Do you support telehealth?

Yes, we do. **We can provide a telehealth kit.** Many of our patients take the exam from the comfort of their own home. Our system allows **providers** to order, monitor, and review exams from any location and on any browser.

Am I locked in to using Virtual Eye?

No. We require no contracts, no minimums, and no hidden fees. You have the ability to cancel anytime.

How do I view test results?

Test results can be viewed as a PDF or JPEG (or DICOM file) in your account. From there, you can download the file and upload it to your EMR or print it out.

How is the device cleaned?

Each device contains a synthetic leather cover and plastic frame that can be disinfected with any alcohol cleaner. We also provide white disposable VR hygiene covers to use for each new patient.



Comparison 1

Standard Thresholding

24-2 on VRVF vs HFA (Zeiss)

Right Single Field Analysis

24-2 Standard

24-2 Standard

Fixation Target: Central Point

Fixation Losses: 1 / 12

False Positive Errors: 0%

False Negative Errors: 2%

Test Duration: 04:37

Foveal Threshold: 33

Stimulus: III. Isabelline

Background: Black

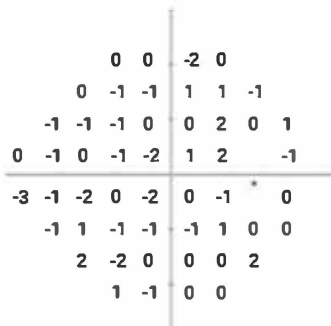
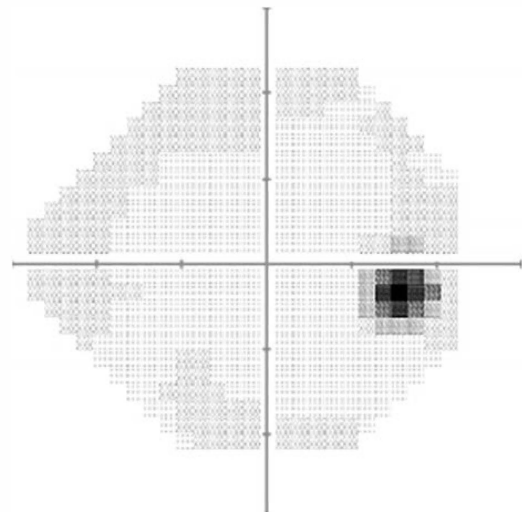
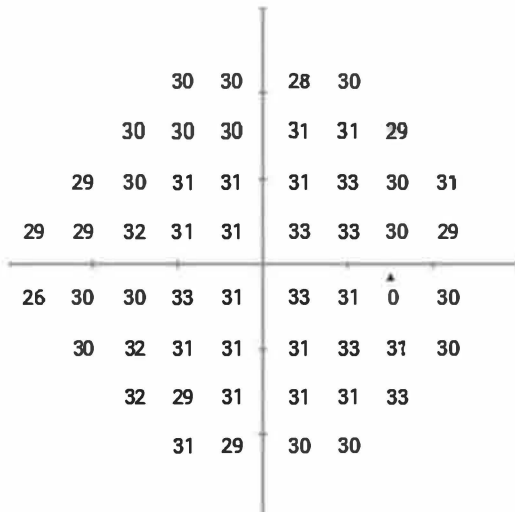
Strategy: Standard

Pattern: 24-2

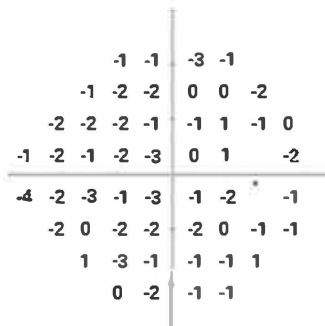
Date: 08/15/2021

Time: 7:51 PM

Age: 61



Total Deviation

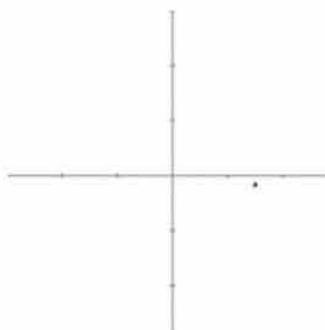
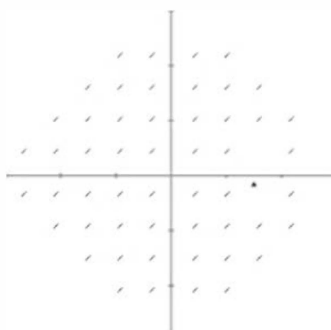


Pattern Deviation

VFI: 100%

MD: -0.41 dB

PSD: 0.88 dB



▨ P < 5%

▩ P < 2%

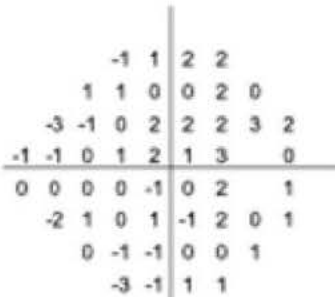
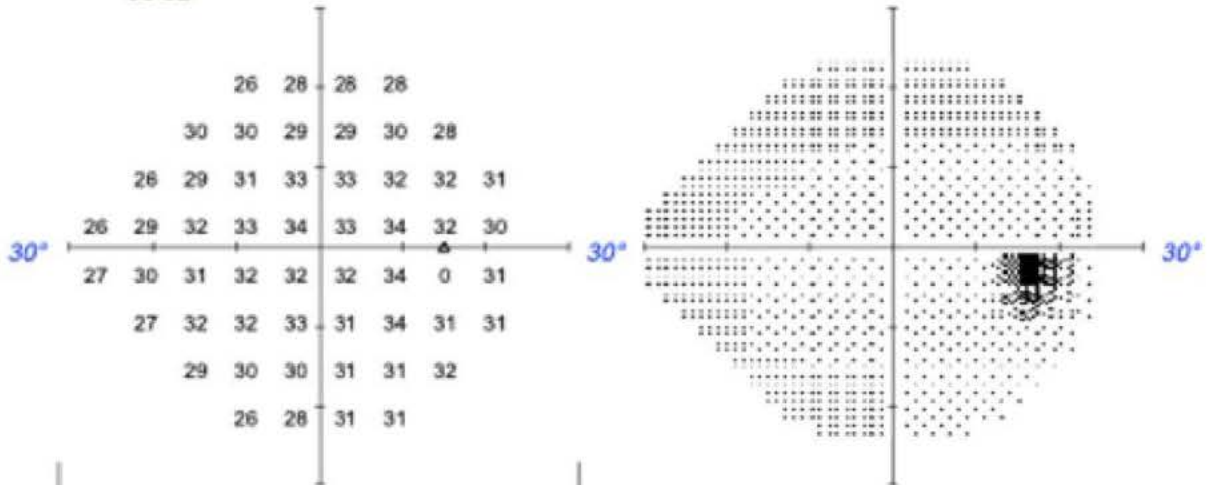
▧ P < 1%

■ P < 0.5%

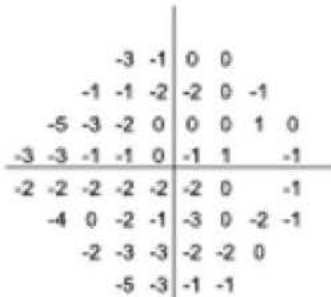
Comparison 1 Standard Thresholding 24-2 on VRVF vs HFA (Zeiss)

OD Single Field Analysis Central 24-2 Threshold Test

Fixation Monitor:	Gaze/Blind Spot	Stimulus:	III, White	Date:	Aug 15, 2021
Fixation Target:	Central	Background:	31.5 asb	Time:	4:23 PM
Fixation Losses:	0/13	Strategy:	SITA Fast	Age:	61
False POS Errors:	0%	Pupil Diameter:			
False NEG Errors:	0%	Visual Acuity:			
Test Duration:	03:17	Rx:	+3.00 DS		
Fovea:	36 dB				



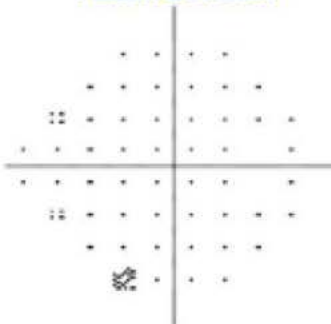
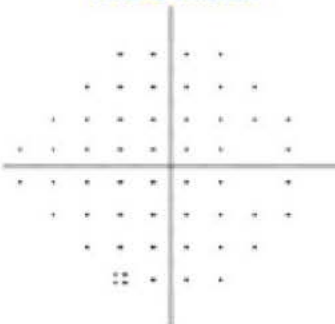
Total Deviation



Pattern Deviation

GHT: Within Normal Limits

VF124-2: 100%
MD24-2: 0.33 dB
PSD24-2: 1.34 dB



:: P < 5%
⊘ P < 2%
⊗ P < 1%
■ P < 0.5%



Comments

Signature



Comparison 2 Regular Screening VRVF vs FDT (Zeiss)

Right Single Field Analysis

24-2 Screening

24-2 Screening

Strategy: Screening

Fixation Target: Central Point

Questions Asked: 54

Exam Duration: 00:51

Fixation Losses: 0 / 3

Pattern: 24-2

Stimulus Size: III

Colors: White on Black

False Positives: 0 / 2

False Negatives: 0 / 2

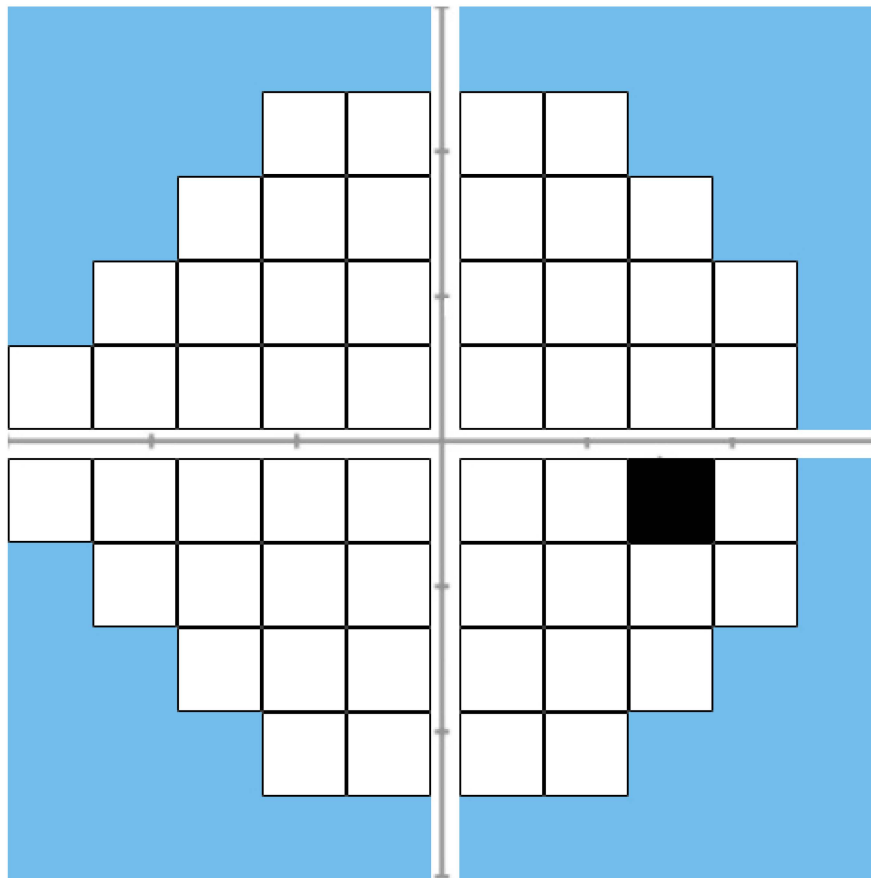
Eye: Right (OD)

DOB: 2000-06-05

ID:

Date: 06/10/2022

Time: 3:34 PM CUT



- WITHIN NORMAL LIMITS
- MILD RELATIVE LOSS
- MODERATE RELATIVE LOSS
- SEVERE LOSS

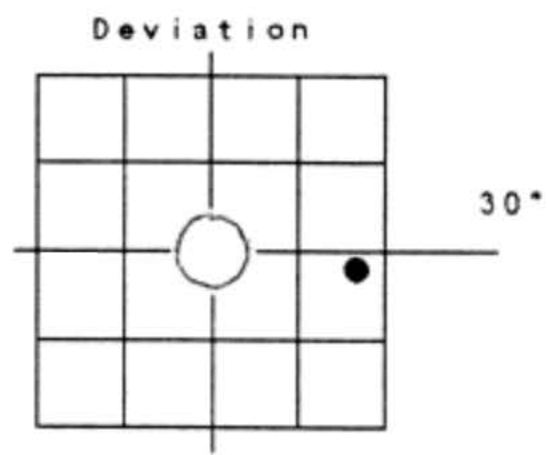
Seen: 53 / 54

Missed: 1 / 54

Comparison 2
Regular Screening
VRVF vs FDT (Zeiss)

RIGHT EYE

Test Duration: 00:41 min



FIXATION ERRS: 1 / 3
FALSE POS ERRS: 0 / 3

Probability Symbols
[] P >= 5%
[] P < 5%
[] P < 2%
[] P < 1%



Comparison 3 Superior 64 Ptosis Screening VRVF vs HFA (Zeiss)

Left Single Field Analysis Superior-64 Screening Superior-64 Screening

Strategy: Screening
Fixation Target: Inferior Set
Questions Asked: 64
Exam Duration: 03:27
Fixation Losses: -

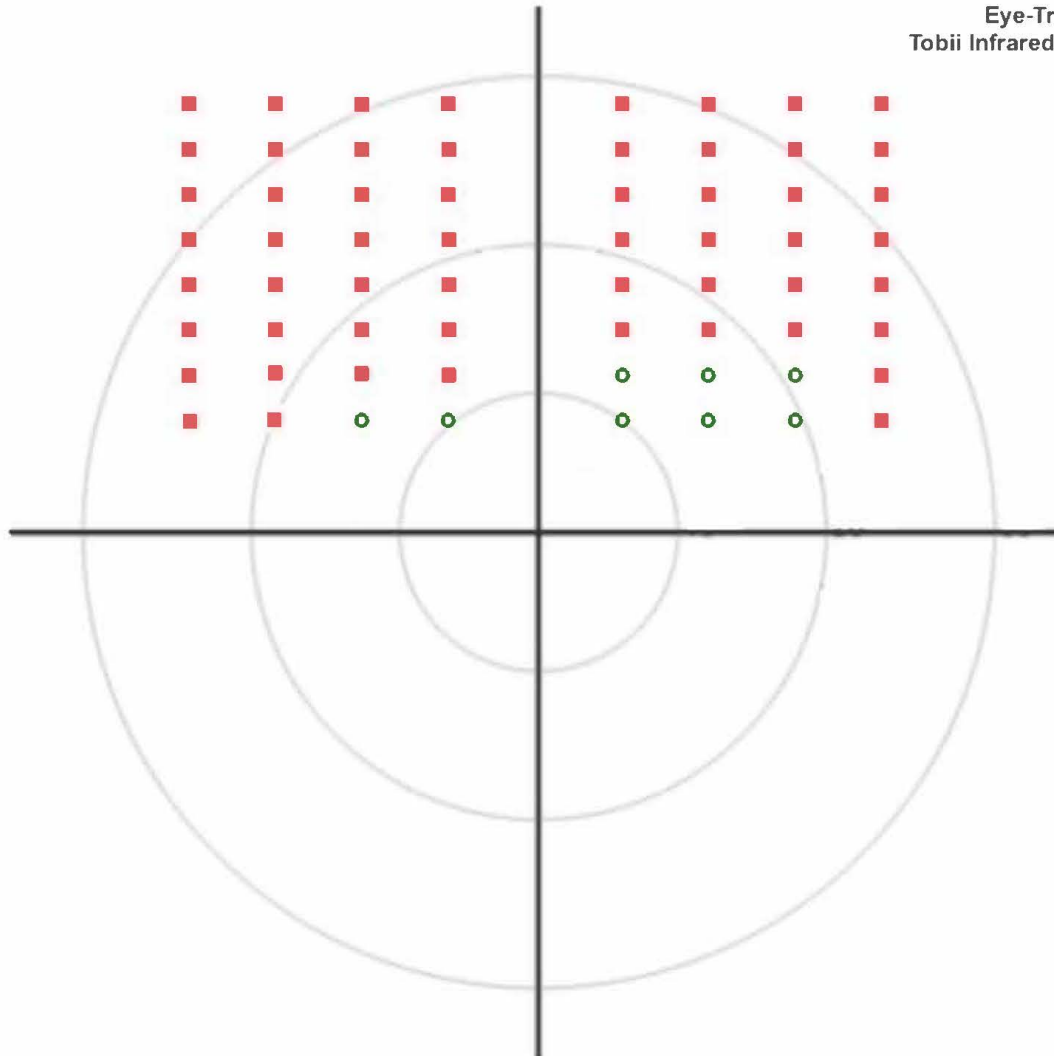
Pattern: Superior-64
Stimulus Size: III
Colors: White on Black
False Positives: -
False Negatives: -

DOB:
ID:
Date: 03/30/2022
Time: 4:24 PM

Eye: OS



Eye-Tracking
Tobii Infrared Photography



○ - Seen: 8 / 64

■ - Missed: 56 / 64

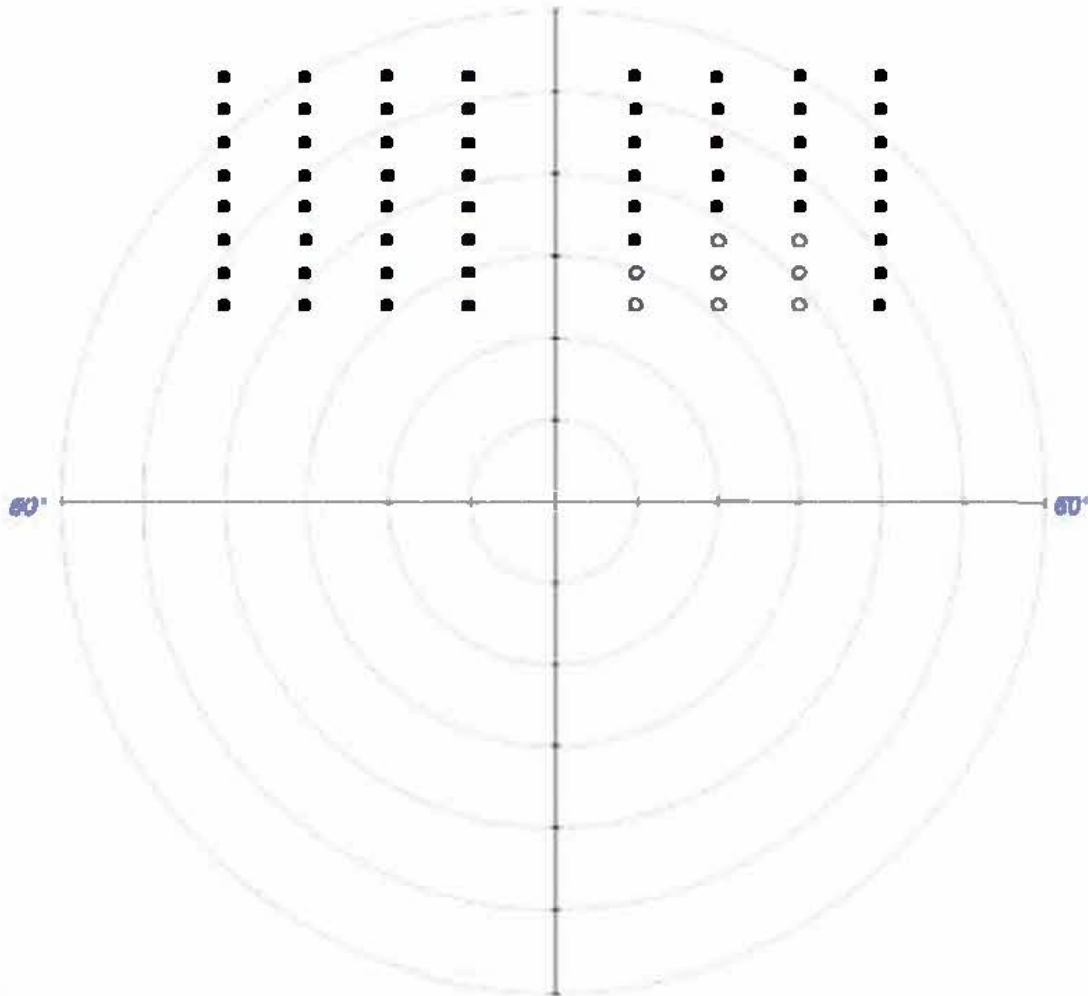
Comparison 3 Superior 64 Ptois Screening VRVF vs HFA (Zeiss)

OS **Suprathreshold** **Superior 64 Point Suprathreshold Test**

Fixation Monitor: Off
 Fixation Target: Backren LED
 Fixation Losses: 0/0
 False PCS Errors: 0/0
 False NEG Errors: 3/9 XX
 Test Duration: 14.55
 Stimulus Intensity: 10dB

Stimulus: Ill, White
 Background: 31.5 esb
 Strategy: Two Zone
 Test Mode: Single Intensity
 Pupil Diameter:
 Visual Acuity:
 Rx: +3.00 DS

Date: Mar 30, 2021
 Time: 3:30 PM
 Age: 58



- Seen B/64
- Not Seen 56/64
- ▲ Blind Spot

Signature





VIRTUAL EYE

By Virtual Vision Health